



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

DEC 17 2010

REPLY TO THE ATTENTION OF:

WW-16J

U.S. Army Corps of Engineers, Louisville District
James M. Townsend, Chief
Regulatory Branch
P.O. Box 50
Louisville, Kentucky 40201-0059

Re: Response to comments from Lily Group, Inc. regarding Pre-Construction Notification LRL-2010-438, Landree Mine

Dear Mr. Townsend:

The United States Environmental Protection Agency has considered Lily Group Inc.'s (Lily) December 6, 2010 response to our Pre-Construction Notification comments regarding the Landree Mine, submitted to your office on November 30, 2010. The Landree Mine is located in Greene County, Indiana. Underground mining and surface mining operations are proposed to impact 6,618 linear feet of stream of ephemeral and intermittent streams and 3.3 acres of open water within the Busserson Creek Watershed. EPA offers the following comments:

As requested, Lily provided a surface operations map. The map appears to show placement of soil stock piles within aquatic resources (streams) onsite. These features should not be placed in streams. To demonstrate avoidance and minimization, the applicant should preserve the existing natural channel and maintain stream functions and values during and post construction. Additionally, appropriate Best Management Practices (BMPs) must be utilized (e.g. land grading) during mining in order to reduce sediment in the undisturbed streams onsite.

Lily provided EPA with additional information in an effort to demonstrate how this project will not cause or contribute to further impairment to the Mud Creek and Big Branch sub watersheds of Busseron Creek, which are on the State of Indiana's 303(d) list of impaired waters. While the discussion includes past and current impacts to waters onsite, there is little substantive information detailing how this specific project will not cause or contribute to further impairment as a result of this project, considering the range of mining activities/operations proposed onsite.

The Cumulative Impacts Assessment (CIA) discusses how past mining activities in both the Big Branch and Mud Creek sub watersheds have resulted in significant degradation. As such, continued mining activity in the area is likely to contribute to further impairment. Increased erosion and transport of sediments associated with mining can alter the flow rate of stream channels downstream, transport chemicals downstream, and adversely affect downstream aquatic

ecosystems. Although modern reclamation practices may reduce some of the environmental effects of surface coal mining, significant harm to a landscape and its watershed still occurs during the active phases of coal extraction prior to reclamation. Lily acknowledges and anticipates high rates of runoff during mining and post mining, which are not expected to decrease until after final reclamation (i.e. fully vegetated, streams restored and impoundments completed). While sediment basins are proposed to alleviate elevated concentrations of sediment that will occur as a result of this project, the applicant indicates an increased potential for structural damage to sediment basins due to unplanned subsidence from the underlying underground mining operations. Furthermore, the establishment of a coal refuse disposal area in the low lands and slurry ponds in the upland areas introduces potential mechanisms that may contribute to downstream impacts. Given the circumstances noted above, EPA believes additional information is required to show that the project as proposed will not cause further impairment to the 303(d) listed waters within these sub watersheds both during and post mining.

EPA identified potential misclassifications of stream flow regimes onsite. Lily responded by reclassifying the lower 800 feet of Stream PC02S to intermittent and leaving 250 feet of the upper reach as ephemeral. The mitigation plan needs to be revised to reflect the change in flow regimes onsite. Please provide the revised plan to EPA prior to determination of Nationwide Permit coverage by the Corps.

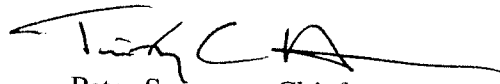
As stated in our previous letter, it is important that biological monitoring, along with water chemistry and physical assessments, occur prior to the initiation of mining activities to establish baseline conditions, during the mining activities to assist in determining potential impacts to aquatic habitat, and after the completion of stream restoration and site reclamation activities at the mine site where appropriate to determine mitigation success. To date, only physical habitat assessments have been completed by the applicant. Lily states that macroinvertebrate species (B-IBI) and/or fish species (IBI) biological studies will be completed after stream restoration. We support the use of this methodology; however, in order to define success criteria in the monitoring and mitigation plan, baseline conditions must be established *prior to* initiating mining to demonstrate that post mining conditions will be similar or better than pre-mining conditions. We understand the constraints of biological sampling in 2010 due to the below average rainfall in Southern Indiana. If the physical condition (i.e. lack of water) limits the existence of macroinvertebrates or fish, Lily needs to provide that information as a part of the biological monitoring. Furthermore, the results of the biological monitoring must be included in the monitoring reports submitted to the Corps.

EPA's initial comment letter stated that biological monitoring on site must continue *at least five years* after the completion of stream restoration and site reclamation activities at the mine site. The intent of the comment was to emphasize the need for biological monitoring during all stages of a mining project as well as state the *minimum* monitoring requirements. Our intent was not to have Lily modify their application to change their proposed ten year monitoring period for stream mitigation to five years. EPA believes a ten year monitoring period is more appropriate for this project considering the proposed alterations to the landscape and impacts to aquatic resources on site from both surface and underground coal mining.

While the Louisville District office does not currently have a mechanism for implementing financial assurances and financial assurance determinations are ultimately left to the discretion of the District Engineer, EPA would like to emphasize that 40 C.F.R. § 230.93(n)/33 C.F.R. § 332.2(n) specifies the importance of establishing these financial instruments to ensure the success of mitigation and to cover any potential mitigation deficiencies. This is important to consider due to the uncertainty in the application of stream creation in the post mining landscape.

EPA requests that the Corps address our concerns prior to qualifying this project for coverage under NWP 50. We appreciate Lily's response to our comments. Please notify us of Lily's response to the comments and any subsequent changes to the permit application. If you have any questions please contact Andrea Schaller at (312) 866-0746.

Sincerely,

A handwritten signature in black ink, appearing to read 'Peter Swenson', with a long horizontal line extending to the right.

Peter Swenson, Chief
Watersheds and Wetlands Branch

cc: Randy Braun, Chief
Section 401 WQC Section
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100 North Senate Avenue
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